

Patent Abstracts of Japan

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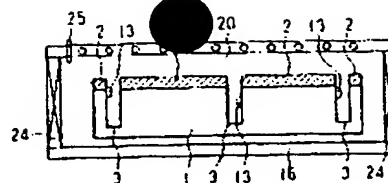
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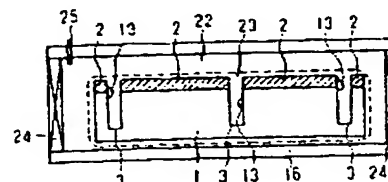
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TITLE : METHOD AND APPARATUS FOR
CLEANING SUBSTRATE

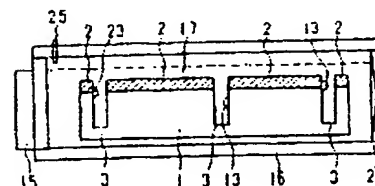
(a)



(b)



(c)



ABSTRACT : PURPOSE: To easily eliminate contamination attaching to the inside of a groove, by irradiating ultraviolet light in an atmosphere containing oxygen to make a substrate surface hydrophilic and by cooling it below dew-point temperature in an atmosphere containing water vapor to form a moisture layer.

CONSTITUTION: A substrate 1 is put in an atmosphere 20 containing oxygen. Ultraviolet light is irradiated onto the surface of the substrate 1 to make it hydrophilic. In an atmosphere 22 containing water vapor, the temperature of the hydrophilic substrate 1 is kept below the dew-point temperature of the atmosphere 22 to form a water bearing layer 23 on the surface of the hydrophilic substrate 1. Cleaning solution 17 is brought into close contact with the substrate 1 and oscillatory wave is irradiated to the substrate 1 from an oscillator 15 to clean the surface of the substrate 1. Volatile substances containing water can be eliminated from the surface of the substrate 1 by irradiating light onto the substrate 1 in a dry atmosphere.

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